

VYSOTSKIY, D.I.; KLINKOVSKIY, G.I.; SABININ, A.A.

[Stock cars in sports competitions] Seriinye avtomobili v skorost-
nykh srovnovaniakh. Moskva, Gos. izd-vo "Fizkul'tura i sport,"
1953. 95 p. [Microfilm]
(Automobile racing) (MLRA 7:8)

ARKHANGEL'SKIY, Yu.A.; DOLMATOVSKIY, Yu.A.; KLINKOVSHTEIN, O.I.,
inzhener, retsensent; BAUMAN, I.M., inzhener, rezhartor; POPOVA,
S.M., tekhnicheskij redaktor.

[The automobile driver's seat.] Rabochee mesto voditelia avto-
mobilja. Moscow, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,
1954. 86 p.
(Automobiles—Design and construction)

RUBETS, D.; KLYMKOVSKYI, O.; PONIZOVKIN, A.

Progressive practice in automobile driving. Avt. transp. 32 no.1:
9-11 Ja '54.
(KLIB 7:8)

1. Vsesoyusnyy nauchno-issledovatel'skiy institut avtomobil'nogo
transporta.
(Automobile drivers)

KLINKOVSKY, O., inzhener

Shortcomings in the organization and regulation of highway and
street traffic. Avt.transp.33 no.6:21-22 Je '55. (MIRA 8:10)
(Traffic engineering)

~~CONFIDENTIAL~~
SUBCHUK, B.; KLINKOVSKYHYN, O.

The ZiS-127 interurban motorbus. Avt.transp.33 no.8:27-29 Ag'55.
(MIRA 8:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtomobil'nogo
transporta

(Motorbuses)

IEVDAKOV, A.; KLINKOVSKY, I.

Seven hundred thousand kilometers without major overhaul. Avt.
transp. 33 no.12:16 D '55. (MLRA 9:3)
(Leningrad--Motorbus drivers)

~~KLINIKOGENNAD~~ ~~Osanin, Il'ich~~; KHAL'FAN, Yury Arkad'yevich;
PAPKOV', S.V., redaktor; DOTSENKO, A.D., tekhnicheskiy redaktor

[Automobile cross-country runs; roadability and automobile
driving] Avtomobil'nye krossy; prokhodimost' i vozhdenie
avtomobilja. Iss. 2-ee, ispr. i dop. Moskva, Gos. izd-vo "Fizkul'tura
i sport," 1956. 164 p. (MLRA 10:5)
(Automobile racing)

KLINIKOVSESTAV a 1 inshener, sud'ya respublikanskoy kategorii.

Percentages and norms; competitions for economic operation of
automobiles. Za rul. 14 no.9:10 '56. (MLRA 10:3)
(Automobiles--Fuel consumption)

ZUBCHUK, B.; KLINIKOVSKYKIN, A.

Prospective types of buses. Avt. transp. 34 no. 6:25-27 Je '56.
(MLRA 9:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtomobil'nogo
transporta.
(Motorbuses)

KLIMOVSKYKH, o. I.

The Moscow-Minsk-Moscow races. Avt. transp. 34 no.10:30
0 156.

(MLRA 9:12)

(Automobile racing)

KLIBOVSKY, O.

In Czechoslovakia, Za rul. 15 ne.1:18-19 Ja '57. (KLIBA 10:4)
(Czechoslovakia—Transportation, Automotive)

KLINKOVSHTEIN, G., inzhener.

"Skilled motorbus driving" by A.A. Bvdakov, S.P. Voiteko. Reviewed by G. Klinkovshtein. Avt. transp. 35 no. 8:39 Ag '57. (NIRA 10:9)

1. Nauchal'nik laboratorii passazhirskikh avtomobiley Nauchno-issledovatel'skogo instituta avtomobil'nogo transporta.

{Motorbuses} (Automobile drivers)
(Bvdakov, A.A.) (Voiteko, S.P.)

KLINOVSHTEIN
ZUBCHUK, B. KLINOVSHTEIN, G.

Comparison of city motorbuses based on some parameters. Avt.
transp. 35 no.11:22-24 N '57. (MIRA 10:12)
(Motorbuses)

PEVZNER, Solomon, Romanovich; KLIMOVSKYIN, G.I., red.; LAKHMAN, F.Io.,
tekhn. red.

[Driving of automobiles; a manual for instructors] Voshdenie
avtomobilia; rukovodstvo dlja instruktora. Izd.6. Moskva, Mashno-
tekhn. izd-vo avtotransp. lit-ry, 1958. 100 p. (MIRA 1187)
(Automobile drivers)

KLINKOVSKYIN, Georgiy Il'ich; SMIRNOVA, V.K., red.; GALAKTIONOVA, Ye.N.,
VKMM, TUD.

[Effect of basic operation factors on the braking of automobiles]
Vliyanie osnovnykh eksploatatsionnykh faktorov na tormoshenie
avtomobilia. Moskva, Avtotransizdat, 1959. 26 p. (MIRA 12:12)
(Automobiles--Brakes)

KLINKOVSKHYN, O., insh.

Investigating and testing braking properties of motortrucks.
Avt. transp. 37 no. 7:19-22 J1 '59. (MIRA 12:10)
(Motortrucks--Brakes)

KLINKOVSHTEYN, G.; KUROPTEV, V.

Pay more attention to the maintenance of motor vehicles. Avt. transp.
37 no.12:39 D '59. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta.
(Motor vehicles--Maintenance and repair)

ILARIOV, V., kand.tekhn.nauk; KLINKOVSKYIY, G., insh.; STROGANOV, V.,
insh.

Methods for scheduling the speed of interurban buses. Avt.
transp. 38 no. 12:15-19 D '60. (MIRA 13:12)
(Motorbus lines)

KLINKOVSHTEYN, G. I., Cand Tech Sci -- "Study of the ~~braking~~
~~qualities of motor vehicles~~ ^{breaking} qualities of ~~automobiles~~ ^{motor vehicles} and methods of ~~cleaning them~~ ^{cleaning them} in operation." Mos /TsINTI/, 1961. (Min of Higher and Sec
Spec Ed RSFSR. Mos Automech Inst) (KL, 8-61, 244)

- 245 -

KLINKOVSHTEIN, O.

Improve the quality of traffic safety posters. Avt.transp. 39 no.2:
58 P '61. (MIRA 14:3)

1. Nachal'nik laboratorii bezopasnosti dvizheniya M-uchno-issledo-
vatel'skogo instituta avtomobil'nogo transporta.
(Traffic safety engineering)

KUDRINSKII, Georgiy Il'ich; SHDOVA, A.P., red.; NIKOLAEVA, L.N.,
tekhn.red.

[Investigating braking characteristics of motor vehicles under
operating conditions] Issledovanie tormosnykh kachestv avto-
mobilei v ekspluatatsii. Moskva, Avtotehnizdat, 1961. 97 p.
(Motor vehicles--Brakes)

PONIZOVKIN, A.N.; BTMANOV, S.Ya.; VINOGRADOV, V.V.; SHURKINA, V.S.
Prinimali uchastiyet KHOZYAISTVIEV, N.V.; KOVAL'CHUK, V.P.;
KTOCHENKO, V.I.; KUBITS, D.A.; KLINOVSKYIN, G.I.;
FILIN, A.G., red.issd-va; MAL'KOVA, N.V., tekhn.red.

[Brief manual on motor vehicles] Kratkiy avtomobil'nyi
spravochnik. Issd.3., perer. i dep. Moskva, Avtotransizdat,
1961. 461 p. (MIRA 14:12)

1. Moscow. Mashinno-issledovatel'skiy institut avtomobil'nogo
transporta. 2. Mashinno-issledovatel'skiy institut avtomobil'-
nogo transporta (for Ponizovkin, Btmanov, Vinogradov, Shurkina).
(Motor vehicles)

KLINKOVSHTEYN, O.I., otv. za vypusk; YABLOKOV, V.I., red.; BODANOVA,
A.P., tekhn. red.

[Manual on traffic safety]Rukovodstvo po obespecheniiu bez-
opasnosti dvizheniya. Moskva, Avtotransisdat, 1962. 107 p.
(MIRA 15:12)

l. Moscow. Nauchno-issledovatel'skiy institut avtomobil'nogo
transporta.

(Traffic safety)

ZNAMENSKIY, Aleksey Nikolayevich[deceased]; KLINKOVSKYIY, Georgiy Il'ich; SHLIPPE, I.S., kand. tekhn. nauk, red.; YABLOKOV, V.I., red.izd-va; GALAKTIONOVA, Ye.N., tekhn. red.

[German-Russian automotive transportation dictionary] Nemetzko-russkii avtotsentrnyi slovar'. Pod red. I.S. Shlippe. Moskva, Avtotransisdat, 1963. 336 p. (MIRA 16:4)
(Transportation, Automotive--Dictionaries)
(German language--Dictionaries--Russian)

BABKOV, V.P.; KLINKOVSHTEYN, O.I., kand. tekhn. nauk, retsenzent;
ALEKSEYEV, A.P., inzh.

[Road conditions and traffic safety] Dorozhnye uslovia i
bezopasnost' dvizheniya. Moskva, Izd-vo "Transport," 1964.
188 p. (MIRA 17:7)

KLINKOVSHTEIN, G.I., kand. tekhn. nauk.; AKSENOV, V.A., inzh.;
SARKIS'YANTS, E.G., inzh.; SHUMOV, A.V., inzh.;
MANUSADZHYANTS, Zh.G., inzh.; TROSHINA, M.Ya., inzh.;
STETSYUK, L.S., inzh.; PARSHIN, M.A., inzh.; KARPINSKAYA,
I.M., inzh.; FAL'KEVICH, B.S., doktor tekhn. nauk;
ILARIONOV, V.A., kand. tekhn. nauk; POLTEV, M.K., inzh.;
KOGAN, E.I., inzh.; CHIGARKO, G.T., inzh.; KOHONOVA, V.S.,
red.

[Traffic safety and safety measures in automotive transportation] *Bezopasnost' dvizheniya i tekhnika bezopasnosti na avtomobil'nom transporte*. Moskva, Transport, 1964. 74 p.
(MIRA 18:1)

1. Moscow, Gosudarstvennyy nauchno-issledovatel'skiy institut avtomobil'nogo transporta. 2. Moskovskiy avtomekhanicheskiy institut (for Fal'kevich). 3. Moskovskiy avtomobil'nodorozhnyy institut imeni Moletova (for Ilarionov). 4. Vsesoyuznyy zaochnyy politekhnicheskiy institut (for Poltev).

KATAYEV, A.; KLINKOVSHTEYN, O.; OSTROVSKIY, N.

Traffic safety and organization. Avt. transp. 43 no.1:46-48
Ja '65. (MIRA 18:3)

BLINCOVSKIY, G., kand.tekhn.nauk; KU.NEFTOV, L.; PAVLENKOV, ...

Traffic organization and safety, Avt.transp. 42 no.12144-48
D '64. (MIRA 18:4)

1. Zamestitel' nachal'nika Gosudarstvennoy avtomobil'noy
inspekcii Glavnego upravleniya militarnogo Ministerstva okhrany
obshchestvennogo poryadka RGFZR (for Puznetsov).

KLINKOVSKIY, M.; KHLER, O.

Prospects in the use of antibiotics in controlling plant diseases.
Zhur. ob. biol. 17 no. 3:169-184 My-Je '56. (MLRA 9:8)

1. Tsentral'nyy biologicheskiy institut Germanovoy Akademii
sel'skokhozyaystvennykh nauk, Berlin i Institut fitopatologii,
Aschersleben.
(ANTIBIOTICS) (PLANT DISEASES)

KLINKOWSKI, M.

Kirkowksi (M.) & Ueha (J.). Die 'Schwarzheit' der Phaseolus-Arten.
[The 'black leggins' of Phaseolus species]. - *Phytopath. Z.*, 22, 4, pp. 406-
420, 10 figs., 3 diagrs., 1952.

From the Phytopathological Institute of the Martin Luther University, Halle-Wittenberg, the authors describe 'black leggins' or wilt disease of beans [bean mosaic virus: *R.A.M.*, 31, p. 163; 33, p. 12], which has been prevalent since 1948 in central Germany on runner [Phaseolus vulgaris] and occasionally on dwarf beans (*P. vulgaris*). The most prominent symptom at the 'green-ripe' stage is the sudden onset of an often complete wilt. The roots and the base of the hypocotyl turn black and typical necrosis develops in the interior of the roots, the leading and certain varieties, e.g., Morabacher and Juli among the runners and the dwarf Herabutter Schwarz. The results of microchemical analyses of the peels of the aerial products of lamine. The disease is transmissible in high percentage through the seed.

Evidence of virus agency in the etiology of the wilt was afforded by needle puncture inoculation and contact grafting experiments.

KLINOT, Jiri

"Aspects of the organic chemistry of sulphur" by P. Challenger.
Reviewed by Jiri Klinot. Chem prum 11 no.11:600 N '61.

1. Karlova universita.

KLINOT, J.; VYSTRcil, A.

Beckmann's regroupment of triterpene-3-ketoximes. Coll Cs Chem 27
no.2:377-386 F '62.

1. Institut fur organische Chemie, Karlsuniversitat, Prag.

KLINOT, J.; VYSTRECIL, A.

By-products in the transitions of allobetaulin to heterobetaulin.
Coll Cz Chem 29 no.2:516-530 F '64.

1. Institute of Organic Chemistry, Charles University, Prague.

OZECOSLOVAKIA

KLINOT, J; VYSTROIL, A

Department of Organic Chemistry, Karlova University,
Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communi-
cation, No 3, March 1966, pp 1079-1092

"Triterpenes. Part 7: Stereochemistry of 2-bromo
derivatives of allebetuline and allcheterobetuline."

KLINOV, P.Ya.

An optical phenomenon during a snowfall. Meteor. i gidrol.
(MLRA 8:9)
no.3:56-57 Mr '53.

1. Aviameteostantsiya, Verkhoyansk.
(Snow)

"APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723130009-6

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED

APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723130009-6"

KLINOV, F. YA.

KLINOV, F. Ya.: "The solid phase of water in the atmosphere at low negative temperatures (from 35 to 59 degrees)." Main Administration of the Hydrometeorological Service, Council of Ministers USSR, Central Inst of Weather Forecasting. Moscow, 1956.

Knizhnaya letopis', No 39, 1956. Moscow.

ELINOV, P.Ya.

Associated crystallization of water vapor of the atmosphere,
Meteor. i gidrol. no. 7:22-25 Jl '57. (MDA 10:8)
(Atmosphere) (Crystallization) (Gyroscopy)

"APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723130009-6

Ice crystals and
Snow. Present as
ice crystals.

APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723130009-6"

SOV-49-53-6-11/12

AUTHOR: Klinov, F. Ya.TITLE: Polar Snow (Polyarnyy sneg)PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 6, pp 796-799 (and 4 plates) (USSR)

ABSTRACT: The ice crystals forming the snow flakes in the atmosphere at a temperature less than -40°C differ from those at above -35°C . The structure of the polar ("cold") snow, as observed by the author in Verkhoyansk in 1952-1954 is described below. The most common shapes of the ice crystals at -40°C are shown in Fig.1. They are groups of crystals falling from the free atmosphere. The size of the flakes is 200-800 μ . The different crystalline forms at -50°C were observed in the layer of the atmosphere nearest to the Earth's surface. The size of those is 100 μ or less (Fig.2). It was observed that many of the unusual crystal shapes were mixed with the above mass-produced forms. The most interesting ones are shown in Fig.3 and Fig.4 (too difficult to be photographed). The variety of forms of the snow flakes is caused by the heterogeneous conditions accompanying the production of ice crystals. In the majority of the complicated cases an original "maternal" structure could always be traced

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Polar Snow.

SOV-49-58-6-11/12

(with few exceptions, see Fig.1/15). The atmospheric conditions connected with a deep, cold depression near the surface and rather warmer upper air can produce the snow flakes of "slate" type ice crystals. The ice crystals formed in the cold air near the Earth are of small "stalk" shape. When the stalk crystals start growing from the slates (originated in the upper levels), a very elaborate form of snow flakes can be produced, often destroying the original, maternal shape (Fig.3/15). It is possible to forecast the type of falling snow by considering the general synoptic situation. The observations of snow carried out on two occasions during the nights of 11-12 and 17-18 February, 1954 gave very interesting results which could add information to the mechanics of snow formation. The respective air temperatures were -57 to -55°C and -43 to -41°C , the relative humidities 75 and 78%, the water vapour pressures 0.02 and 0.11 mb and the deficiencies of saturation 0.01 and 0.03 mb. The snow flakes were collected on the objective glass which was kept outdoors. The size of the ice crystals was $15-60 \mu$ (Fig.5a). The light scatter from the Moon could be observed. During the first night there was a bright halo of an angle $1^{\circ}20'$. The halo was surrounded by a faint greenish ring. A weak

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SOV-49-58-6-11/12

Polar Snow.

vertical column could be seen across the Moon. It could be assumed that the vertical column was the moonlight reflected from the minute ice crystals, while the light ring was caused by the diffraction from the particles of frozen droplets and other similar matter. During the second night the Moon was surrounded by a halo and an outer circle of 22° . It was observed that the size of the ice crystals gradually decreased while the dimension of the halo increased from $48'$ to $2018'$. At the end of the observation time a space between halo and outer ring became tinted violet. The top and the bottom of the outer circle were much more intense than its remaining area. The ice crystals (Fig. 5/6) were very small with no trace of larger particles. The position of the individual crystals on the objective glass was observed to

Card 3/4

SOV-49-58-6-11/12

Polar Snow.

be the same as that during the free fall. Thus the optical phenomena of the sky could be explained by the shape and size of the ice crystals. This kind of observations could lead to better determination of the physical and meteorological effects in the atmosphere when considered together with the general weather conditions. There are 5 figures, 1 table and 4 Soviet references.

SUBMITTED: June 12, 1957.

1. Snow--Physical properties
2. Snow crystals--Structural analysis

Card 4/4

KLINOV, F.Ya., kand.fiz.-matem.nauk

Range of speeds and pressures of a free air vortex. Nauch. trudy
MPI no.7/8:273-284 '58. (MIRA 14:12)
(Vortex motion)

SOV/49-59-9-20/25

AUTHOR: Klinov, F. Ya.TITLE: On Super-Cooled Water in the AtmospherePERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya
1959, Nr 9, pp 1430-1431 + 2 plates (USSR)ABSTRACT: A haze with ground visibility 4 to 10 km, but only 1000 m from the aircraft can be sometimes observed in conditions not justified by the humidity. This condition develops when icing occurs above the temperature inversion at heights corresponding to -35°C which can be up to 1000 m high. Investigations were made with this kind of haze by the author in Verkhoyansk. Samples were collected and photographed. Some of them are illustrated in Figs 1 and 2. It was found that the particles of mist were composed of ice crystals, examples of which are shown in Fig 2a. Their formation can be explained by the presence of super-cooled water in layers of the atmosphere above 400 to 600 m thick at about 900 to 1000 m above the ground level. There are 2 figures and 3 Soviet references.~~Card 1/3~~

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*Inst. Applied ~~Ge~~ Geophysics
AS USSR*

PHASE I BOOK EXPLOITATION

SOV/3350

Klinov, Philipp Yakovlevich

Voda v atmosfere pri nizkikh temperaturakh (Water in the Atmosphere at Low Temperatures) Moscow, Izd-vo AN SSSR, 1960. 168 p. Errata list on the inside of back cover. 1,800 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut prikladnoy geofiziki.

Resp. Ed.: V. V. Piotrovich; Ed. of Publishing House: G. G. Gus'kov; Tech. Ed.: G. A. Astaf'yeva.

PURPOSE: This publication is intended for geophysicists and meteorologists.

COVERAGE: The publication discusses the different phases of atmospheric moisture at low temperatures (-35 to -58°C), and related optical phenomena. The material is based on experiments in the direct crystallization of water vapor, conducted under

Card 1/4

KLINOV, S.Ya.

Observations in the lower atmospheric layer made from towers
and masts. Meteor. i gidrol. no.12:37-42 D '60. (MIRA 13:11)
(Meteorology--Observations)

KLINOV, F.Ya.

Some specific features of the solid phase of water in the atmosphere
at temperatures much below the freezing point. Trudy 000 no. 104:46-
52 '60. (MIRA 13:10)

(Cloud physics)

IVANOV, V.N.; KLINOV, F.Ya.

Some characteristics of a turbulent velocity field in the lowest
300-meter layer of the atmosphere. Izv. AN SSSR. Ser. geofiz.
no.10:1570-1577 O '61. (KIRD 14:9)

AN SSSR, Institut prikladnoy geofiziki.
(Atmospheric turbulence)

KLINOV, P.Ya.

Optical phenomena observable on ice crystals. Trudy 000 no.109,100-
113 '61. (Ice crystals) (Meteorological optics) (MIRA 14:5)

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AFFTC/ASD/ESD-3

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ACCESSION NR: AT3001260

8/0937/63/000/000/0003/0040

AUTHOR: Klinga, V. Ya.TITLE: Studying the atmospheric boundary layer with a 300-meter meteorological tower 12 63SOURCE: Isucheniiya pogranichnogo sloya atmosfery s 300-metrovyy meteorologicheskoy bашni. Moscow, Izd-vo AN SSSR, 1963, 3-40TOPIC TAGS: meteorology, observatory

ABSTRACT: The Institute of Applied Geophysics is systematically making a wide range of automatic meteorological and radiation measurements in the lower 300-m layer of the atmosphere from a specially designed meteorological tower (a welded-steel guy-supported tubular mast 310 m high and 2.4 m in diameter). Measurements are made from two points at the top and from 13 balconies spaced approximately 24 m apart along the mast. Arms 6 m long with sensing elements at the ends extend from each balcony in N, S, E, and W directions. The elements are measured with the following accuracy: wind velocity, 0.2-0.5 m/sec; wind direction, 2-5°; temperature, 0.1°; humidity, ± 3%; temperature fluctuations, 0.01°; wind velocity fluctuations, several cm/sec; and wind direction fluctuations.

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L 11128-63

ACCESSION NR. AT3001260

1-3% of the scale. A small enclosed observatory atop the tower is used for making special observations; measurements are recorded and instruments controlled from a special building at the base of the tower. This article is from a collection of articles describing the tower and its instruments and the results of some of the research carried out at the tower.

ASSOCIATION: none

SUBMITTED: 00

SUB CODE: AB

DATE ACQ: 14Jun68

NO REF Sov: 000

ENCL: 00

OTHER: 000

Card 2/2

KLINOV, P.Ya.

"Electric measurements of aerophysical values" by L.O.Kachurin.
Reviewed by P.IA.Klinov. Metod.i gidrol. no.8:57-58 Ag '63.
(MIRA 16:10)

ACCESSION NR: AT4010224

S/3056/63/000/000/0053/0059

AUTHOR: Klinov, F. Ya.; Poltavskiy, V. V.

TITLE: Measurement of wind velocity in the lower 300 meter layer of the atmosphere from a high meteorological tower

SOURCE: Issledovaniye nizhnego 300-metrovogo sloya atmosfery*. Moscow, 1963, 53-59

TOPIC TAGS: meteorology, wind velocity, wind velocity measurement, anemometer, lower atmosphere, photoelectric anemometer, wind velocity profile, wind velocity altitude dependence

ABSTRACT: The authors present a block diagram and a detailed description of the operating characteristics of an improved photoelectric anemograph developed on the basis of the remote-controlled anemograph developed at the Leningradskiy gidrometeorologicheskiy institut (Leningrad Hydrometeorological Institute). This apparatus consists of a system of photoimpulse transmitters situated at various levels of the tower; a converter, consisting of a pulse-shaping cascade, an assembly of individual converting lines, and a terminal amplifying cascade; a relay recorder; and a power unit. A calibration curve for the photoimpulse transmitters is shown. The authors also present some examples of the wind velocity profiles

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ACCESSION NR: AT4010224

In the lower 300-meter layer obtained by means of their improved apparatus.
"N. P. Tofanchuk, V. S. Storozhko, and others took part in the development and
perfection of the apparatus." Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 20Feb64

ENCL: 00

SUB CODE: AS, SD

NO REF Sov: 009

OTHER: 000

Card 2/2

ACCESSION NR: AT4010226

8/3056/63/000/000/0064/0070

AUTHOR: Klinov, F. Ya.; Andreyev, V. D.

TITLE: Measurement of temperature in the lower 300 meter layer of the atmosphere from a high meteorological tower

SOURCE: Issledovaniye nizhnego 300-metrovogo sloya atmosfery. Moscow, 1963, 64-70

TOPIC TAGS: meteorology, lower atmosphere, atmospheric temperature, temperature measurement, atmospheric temperature measurement, temperature profile, air temperature altitude dependence, thermogradiograph

ABSTRACT: The structure and operating characteristics of a new thermogradiograph developed on the basis of the remote-controlled, automatic instrument at the Leningradskiy gidrometeorologicheskiy institut (Leningrad Hydrometeorological Institute) are described in detail, with a block diagram illustrating its use to determine the temperatures at various levels of a high meteorological tower. The apparatus consists of transmitters with the operating arms of measuring bridges, a network of relays and a multichannel recorder; the bridges which serve as the sensory elements of the transmitters consist of one copper resistor and 3 manganin resistors. Several temperature profiles obtained with this apparatus

ACCESSION NR: AT4010226

and a graph relating temperature and time at various altitudes are presented. The results show that the instrument may be used within a temperature range of -40 to +40C. "V. S. Storozhko, B. P. Zotov, L. Ye. Lobova and others took part in the development and perfection of the thermogradientograph." Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 20Feb64

ENCL: 00

SUB CODES: AS, SD

NO REF Sov: 007

OTHER: 000

Card 2/2

TSVANO, L.R.; ZUBKOVSKIY, S.L.; IVANOV, V.N.; KLINOV, F.Ya.;
KRAVOCHENKO, T.K.

Measurement of some characteristics of turbulence in the
lower 300 meters of the atmosphere. Izv. AN SSSR Ser. geofiz.
no. 5:769-782 My '63. (MIRA 16:6)

1. Institut fiziki atmosfery AN SSSR.
(Atmospheric turbulence)

L 23471-65 EWT(1)/POO GW

ACCESSION NR: AP5001817

8/0050/65/000/001/0053/0058

AUTHOR: Klinov, F. Ya. (Candidate of physico-mathematical sciences)

g

TITLE: A 300-meter meteorological tower^{1/2} and its apparatus complex as used to investigate the lower layer of the atmosphere B

SOURCE: Meteorologiya i gidrologiya, no. 1, 1965, 53-58

TOPIC TAGS: meteorological tower, micrometeorology, atmospheric boundary layer

ABSTRACT: An array of equipment for automatic meteorological^{1/2} measurements in the lower 100-meter layer of the atmosphere has been developed at the Institut prikladnoy geofiziki (Institute of Applied Geophysics) in accordance with the plan of Ye. A. Fedorov. The tower is a tubular metallic mast, 310 m high and 2.4 m in diameter. A mast at the top extends the total height to 315 m. The tower is made of 6-foot steel units welded together. Steel cables are attached at several heights to serve as guys. Carriers are suspended at different heights for radial observations. There are work areas on the extendable vertical mast at the top (315 m), on the upper platform (310 m), and on 13 other platforms ranging in height from 24.6 m to 310.2 m. These platforms are 1-1.5 m wide. Four booms 6 m long extend from each platform (N, E, S, and W) with sensor arrays

Card 1/2

L 23471-65

ACCESSION NR: AP3001617

8

at the end of each. An elevator operates within the tower, and power lines and recording lines are also strung inside. At various heights automatic readings are made of temperatures, wind velocity, two-dimensional wind direction, humidity, radiation characteristics (total, direct, diffuse, reflected, and radiation balance), and some turbulence characteristics. The automatic records are kept on tape, some directly from the sensors, some in discrete data supplied by computers (as for wind direction). The present equipment provides what is called "passive" measurements. The goal is "active" measurements, i.e., data on variations in time (seasonal fluctuations, trends, and so forth), in order to make better predictions and to understand broader problems. V. D. Andreyev, V. S. Storozhko, S. P. Luk'yanov, V. V. Poltavskiy, V. G. Stefanova, and others constantly worked with the author to make use of the described installation. The photographs illustrating the present article were made by V. S. Storozhko and V. P. Voronin. Org. art. has: 4 figures.

COLLATION: Institut prikladnoy geofiziki (Institute of Applied Geophysics)

INC JFTED: 00

INC R&P Sov: 011

ENCL: 00

OTHER: 000

SUB CODE: ES

Card 2 /2

I 23423-66 EWT(1)/FCC GW
ACC NR. AT6012594

SOURCE CODE: UR/3201/65/000/002/0074/0083

24

B71

AUTHOR: Klinov, F. Ya.; Loboza, L. Ye.ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)TITLE: Meteorological conditions in an observed case of a frontal storm

SOURCE: Leningrad. Institut prikladnoy geofiziki. Trudy, no. 2, 1965. Pogranichnyy slyz atmosfery (Boundary layer of the atmosphere), 74-83

TOPIC TAGS: micrometeorology, meteorological tower, frontal movement, frontal turbulence lightning, turbulence lapse rate, wind gradient, pressure gradient

ABSTRACT: Continuous measurements made at the 300-m meteorological tower include those carried out during storms. This paper gives a detailed account of the meteorological conditions in the lower 300-m layer of the atmosphere as a front passed the tower on 9 July 1963 between 2000 and 2300 hr. The front approached from the west at a speed of 20-30 km/sec and was connected with a low whose center was in the northern European USSR. Back of the front, and traveling at about the same speed, was a rather narrow high-pressure ridge. Somewhat west of the high there was another, rather shallow low (1005 mb) moving toward the northeast. The full range of temperature changes took place in 1 1/2 hr and wind-direction changes, in 1/2 hr. Lightning and rain showers preceded and accompanied the frontal passage. Measurements of atmospheric temperature, pressure, and wind direction and speed made at the

Card 1/2

UDC: 551.506+508+508.2+508.5+510

I 23423-66
ACC NR. AT6012594

tover are described, analyzed, and illustrated graphically by diagrams, profiles, and tables. Special features such as turbulence, periods of calm, amount and location of eddying and gusts, and a temperature inversion are identified and their interrelationships indicated. Orig. art. has 6 figures and 3 tables. [MB]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 004/ ATD PRESS: 4233

cord 2/28/00

L 23424-66 EMT(1)/FOC GW
ACC NR: AT6012595

SOURCE CODE: UR/3201/65/000/002/0084/0098

AUTHOR: Klinov, F. Ya.

28

B71

ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)

TITLE: Certain characteristics of the meteorological regime of lower 300-meter
layer of the atmosphere
12,44,55

SOURCE: Leningrad. Institut prikladnoy geofiziki. Trudy, no. 2, 1965. Pogranichnyy
sloj atmosfery (Boundary layer of the atmosphere), 84-98

TOPIC TAGS: micrometeorology, meteorological tower, diurnal lapse rate, diurnal
pressure gradient, diurnal wind gradient, atmospheric boundary layer, low level
jet stream, atmospheric turbulence

ABSTRACT: Results are presented of a study of mesoscale inhomogeneities in the lower
layer of the atmosphere, which took into account the diurnal changes in temperature
and wind speed and direction during a period characterized by a stationary summer-
time high-pressure area (a time generally considered as least favorable for the de-
velopment of these inhomogeneities). Three types of inhomogeneities are considered:
1) jet stream in the lower 300-m layer of the atmosphere, 2) eddying in both clear
high-pressure weather conditions and in other weather situations, and 3) during the
passage of a frontal zone. Data used in the analysis were continuous temperature
recordings and measurements of the horizontal component of wind speed and wind

Card 1/2

UDC: 551.506+508+508.2+508.5+510

L 2342-66

ACC NR: AT6012595

direction; measurements were registered every five minutes and averaged for the five minutes. Detailed information is given on the daytime and nighttime fluctuations in the meteorological parameter profiles, gradients, degree of turbulence, occurrence of nighttime inversions, and the maximum wind speeds in the jet streams in the lower layer of the atmosphere (generally in the 150-170-m interval, which coincided with the upper limit of the top of the temperature inversion). Examples are presented which show the agreement between the mesoscale changes in the speed and direction of the wind and temperature. Another example presents detailed data for meteorological parameters measured during the passage of a cold front. Orig. art. has: 8 figures and 8 tables.

[ER]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 007/ ATD PRESS: 4233

Card 2/2

L 23427-66 EWT(1)/TCC GW
ACC NR: AT6012598

SOURCE CODE: UR/3201/65/000/002/0114/0122

29

AUTHOR: Klinov, P. Ya.; Andreyev, V. D.; Poltavskiy, V. V.; Lobova, L. Ye.

33

ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)

B71

TITLE: Measurement of two wind-direction components at the high meteorological tower

SOURCE: Leningrad. Institut prikladnoy geofiziki. Trudy, no. 2, 1965. Pogranichnyy sloy atmosfery (Boundary layer of the atmosphere), 114-122

TOPIC TAGS: micrometeorology, meteorological instrument, meteorological tower, wind measuring set, bivane

ABSTRACT: A wind-direction measuring set is used to measure the horizontal and vertical components of the direction of the wind-velocity vector. The set consists of transducers whose sensing element is a special "bivane," a recorder, a digital printing device, and a power supply; it is installed on the high meteorological tower of the Institute of Applied Geophysics. The bivane consists of a three-arm system balanced on a column, the arms being set 120° apart. A ring stabilizer is mounted on the end of one arm, 320 mm from the system's center of rotation. It was established experimentally that the flow of air is distorted by the transducer casing to a distance not more than 200-250 mm from the casing; thus the stabilizer is within the undisturbed flow, which ensures accurate tracking of wind directions (within the limits of system errors). The instrument and the bivane are described. At

Card 1/4 UDC: 551.506+508+508.2+508.5+510

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present, the transducers are installed on 5 levels of the tower; the threshold sensitivity (both vertical and horizontal) of the transducers is about 0.6 m/sec. If the initial mismatch between the bivane and the wind direction is 0° or 180° , the threshold value is higher—1.0—1.3 m/sec. The principle measurement errors are: 1) error in the horizontal orientation of transducers relative to the wire on the working levels—1.5—2.0°; error due to mismatch of the servosystem—1.0—3.0° (transducer selsyn, 0.5—1.0°; and sensor selsyn, 0.75—1.5°); 3) error in readings from the diagram tape in the recording system—2.5°. Thus, the total error in measuring wind directions is about 5—7° (see Fig. 1). Some variations in profiles of the wind direction in the lower 300 m of the atmosphere are shown. These profiles were constructed for 30-min intervals, which permitted stable forms of curves that represent "sets" of possible forms of wind-direction profiles in the layer (see Table 1). One group of profiles shows a shift to the right with height in the wind direction throughout the entire layer (I, II), and to the left (XVI—XVIII); in a number of cases, the wind direction was constant throughout most of the entire layer (IV); there were layered combinations of right and left shifts in the wind along with constant directions (X, XII). The recording bivane was designed and tested under the supervision of G. I. Tsitsurin. N. P. Tofenchuk, V. S. Storozhka, V. G. Stefanov, and G. S. Vasil'yev participated in developing the wind-direction measuring set installed on the high tower and procedures for two-dimensional wind

Card 2/4

L 23427-66

ACC NR. AT6012598

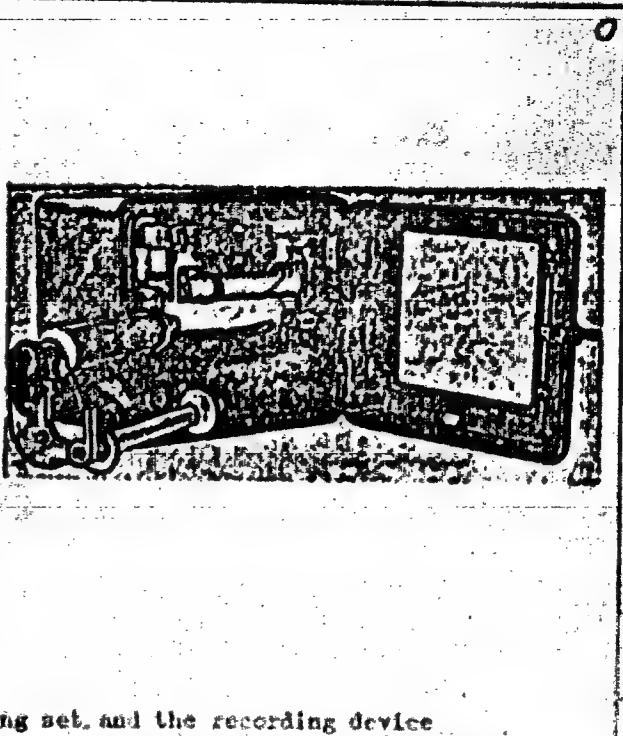
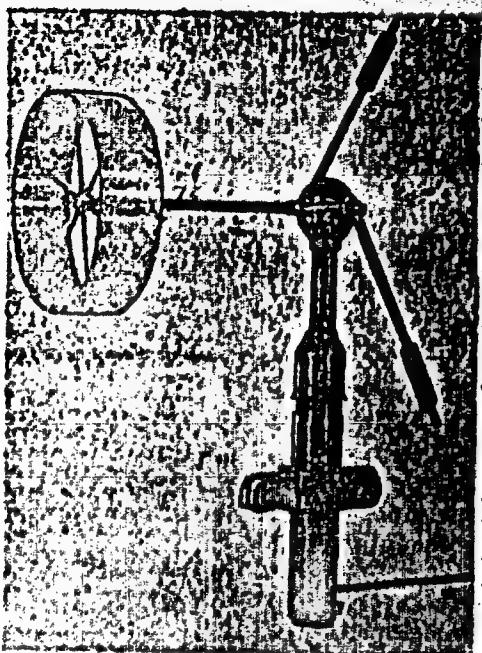


Fig. 1. Wind-direction measuring set, and the recording device

Card 3/b

L 23427-66

ACC NR: AT6012598

Table 1. Some of the variations in wind-direction profiles in the lower 300 m layer of the atmosphere

Cases	a	b	c	d	e
AH	80	15	60	70-90	90-150
AB	10	3	15	40-50	90-150
AH/AB	8	3	4	2	1

measurements in the lower 300 m of the air. Orig. art. Has: 6 figures and 3 tables.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 001/ ATD PRESS:

4233

Card 6/6 2/2

ACC N2: AP7010696

SOURCE CODE: UR/0050/66/000/008/0023/0028

AUTHOR: Klinov, P. Ya. (Candidate of physico-mathematical sciences)

ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)

TITLE: Variability of the height of the upper boundary of a fog
and low clouds

SOURCE: Meteorologiya i hidrologiya, no. 8, 1966, 23-28

TOPIC TAGS: fog, atmospheric cloud

SUB CODE: 04

ABSTRACT: Study of the variability of the upper boundary of a fog and low stratiform clouds is being carried out on the high meteorological mast of the Institute of Applied Geophysics both visually during ascents to its upper levels and by evaluation variations with time of the principal meteorological elements. This paper describes in detail the analysis of two particular observations, illustrating the observational methods, analytical procedures and the results which can be obtained from such observations. The first case is a thorough analysis of temperature and wind velocity conditions in the lower 300-m layer of the atmosphere during the development, stable state and disappearance of a radiation fog on 29 December 1962 at a time when the mast was

UDC: 551.575+551.576.4

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2893

ACC NR: AP7010696

on the periphery of an anticyclone in a stable air mass. The second case described was observations of stratiform clouds in the lower 300-m layer on 15-16 October 1964 at a number of different heights prior to the appearance of low clouds, during their presence and when they reached the upper boundary of about 300 m with the formation of a fog in this layer. At this time the nest was in the warm sector of a cyclone, behind a warm front. Therefore, the nature of this paper is a methodological study, and the observations described warrant drawing no generalized conclusions. Orig. art. has: 2 figures, 5 formulas and 2 tables. [JPRS: 40,291]

Card 2/2

BASKOV, Ye.A.; KLIMOV, G.I.

Composition and conditions governing the formation of mineral
waters in Transbaikalia. Trudy VSEGEI 10:50-88 '63.
(MIRA 17:6)

KLINOV, I.

"The Increasing Production of Substitute Materials." Tr. from the Russian. p. 816
(STROJIRENSTVI, Vol. 3, No. 11, Nov. 1953) Praha, Czechoslovakia

SO: Monthly List of East European Acquisitions, Library of Congress, Vol. 3, No. 4,
April 1954. Unclassified.

KLINOV, I. G.

"Experimental and Theoretical Investigation of Some Matters
in the Prestressing and Mechanical Strengthening of Steel Beams."
Cand Tech Sci, Leningrad Construction Engineering Inst, Leningrad,
1954. (RZhMekh, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions (15)

SOV/137-58-7-15680

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 253 (USSR)

AUTHOR: Klinov, I. G. *and Tech Sci*

TITLE:

Experimental Investigation of the Effect of Linear Work Hardening of Low-carbon Steel on its Ductility During Subsequent Deformation in the Opposite Sense (Eksperimental'noye issledovaniye vliyaniya lineynogo mehanicheskogo uprochneniya malouglерodistoy stali na yeye plastichnost' pri posleduyushchem deformirovaniи v obratnom napravlenii)

PERIODICAL: Sb. nauchn. tr. Leningr. inzh.-stroit. in-t, 1957, Nr 26,
pp 224-238

ABSTRACT: Previously stretched cylindrical specimens (S) 22 mm in diameter and having a 320-mm long working section were cut into short cylindrical S which were then subjected to compression; conversely, S 6 mm in diameter were machined from previously compressed cylindrical S 30 mm in diam and 75 mm long for tensile tests. Also studied was the ductility of steel on stretching after double hardening (H), namely, first by stretching and then by compression. It is shown that if the preliminary mechanical H and the consequent loading are of

Card 1/2

KLINOV, I.G.

Stability analysis of the flat bending of rolled I-beams beyond
the elastic limit. Nauch. dokl. vys. shkoly; stroi. no. 2:149-155
'59. (MINA 13:4)

1. Rekomendovana kafedroy stal'nykh konstruktsiy Leningradskogo
inzhenerno-stroitel'nogo instituta.
(Girders)

KLINOV, I.O., kand.tekhn.nauk

Stability of plane bending beyond elastic limits. Sbor. nauch. trud.
LISI no.3:153-171 '59. (MIRA 13:?)
(Steel, Structural) (Strains and stresses) (Girders)

APPROVAL OF WOOD IN CHEMICAL EQUIPMENT. J. Attemp. (Abraham B. 23514 (1933).--Tests of wood impregnated with paraffin, linseed oil and laquerite showed an increasing resistance to penetrating action of HCl and Ac₂O in the order given. C. B.

R

COMMON MATERIALS SOURCE

Khnyev, I. Ya., and Butcher, D. L. Tsvitul-Matiu
(CARBON) AND RAW MATERIALS FOR THE ALUMINUM INDUSTRY.
Izgiz Metallurg., 2 (10) 26-30 (1934).—A method is de-
scribed for obtaining 90.9% aluminum (0.1% Fe_2O_3) from
ash of the slate fired to 70% when treating it with hydro-
chloric acid.

CN

Wood in chemical apparatus construction. I. Ye. Klimov and V. P. Shadrin. Khim. Mashinostroyeniye 1954, No. 3, 22-6. Wood impregnated with liquid bakelite (A-modification) was found to be highly resistant chemically. Samples of impregnated wood were kept in cylinders filled with an acid, alkali or salt soln., with or without stirring, for various periods and at various temps. In the following, the 1st no. after the comma, formula represents the temp., the 2nd no. the concn. in percentage and the 3rd no. duration of test in months: NaCl 20, 20, 0; NaCl 80, 30, 0; NaOH 34, 60, 4.5; NaOH, 60, 30, 0.5; H₃PO₄ 20, 60, 0.5; AcOH 20, 60, 0.5; (CH₃COO)₂ 20, 60, 0.5; HCl 20, 40, 0; NH₄OH 20, 20, 4.5; AlCl₃ 60, 60, 10; MgCl₂ 170, medium, 1.5; NH₄Cl 20, 30, 0; (NH₄)₂SO₄ 20, 20, 0; Na₂CO₃ 60, 10, 0; NaOH 20, 10, medium, 1.5; H₂SO₄ 30, 3.5-4, 4.5; Cl₂ 20, 7, 4.5 and HCl (gumous) 20, 14.5, 4.5. In all cases, except NaOH, the wood samples showed very great resistance to corrosion. S. L. Maderov

AIA 318 METALLOGICAL LITERATURE CLASSIFICATION

8C

8-1-6

Revised analysis of chromite. ANDREWS, T. J.
 ANDREWS and W. J. ANDREWS. Cleved. Lab., 1954, 3, 294.
 A 10 g. sample of chromite is boiled with 20% KOH, when
 the chromite is dissolved, and Fe and Cu precipitate
 as 5% KOH and then with H_2O_2 and dissolved in
 water. 50% HNO₃ is then added. + washings are made
 with H₂O. A portion of the residue is taken for electrolytic
 reduction (1000 A. for 20 min.). 0.02
 H_2O_2 is added to the solution of the filtrate, and
 the yellow solution is compared with that given by
 a standard solution (0.05% Fe). The MnO₄ solution
 of Fe and Cu is then treated with 10% H_2O_2 , a 20%
 solution of which is equivalent to 10% $Pb(OH)_2$, which
 is then dissolved with 10-15% eq. H_2N_2 , the filtrate +
 washings are made up to 200 cc., and the blue solution
 is compared with that given by a standard solution
 (0.05% Cu). 2700 Pb(OH)₂ is dissolved in the last
 100 cc. of 20% H_2O_2 , 10 cc. of 20% eq. sulphosalicylic acid
 are added, with 10% H_2N_2 , the change of colour from violet
 to yellow, when H_2O_2 is added to 1 liter and the coloration
 compared with that given by a standard solution
 (0.015% Fe). The complete analysis requires 1-2
 2 hr.

B. T.

44-114 METALLURICAL LITERATURE CLASSIFICATION

44-114 METALLURICAL LITERATURE CLASSIFICATION

(A)

4. The use of wood in the magnesium industry. I. Ya. Almav and V. P. Shishkov. *Light Metal 4*, No. 3, 20-8 (1961). Borohydride impregnated with wood is resistant to molten MgCl₂ at 120°, to vapor of MgCl₂ and HCl (30°) and to HCl and Cl₂ in the gaseous state.
H. W. Rathmann

450-314 METALLURGICAL LITERATURE CLASSIFICATION

CO

18

The influence of calcium salts on the properties of
alumina. I. Ye. Klimov and D. I. Sushkov. *Lektsii*
Metall. 4, No. 12, 17-28 (1933). The presence of 1-2%
CaCl₂ in Al₂O₃ does not make it more hygroscopic, nor
affect its electrolyte in fused crystalline. CaCl₂ decreases
the sp. gr. of Al₂O₃ and makes the γ -modification more
stable. H. W. Bachmann

ALUMINA METALLURGICAL LITERATURE CLASSIFICATION

1940-1945 1946-1950 1951-1955 1956-1960 1961-1965 1966-1970 1971-1975 1976-1980 1981-1985 1986-1990 1991-1995 1996-1999

Alumina from shale ash. — Ya. Khlov and D. I. Borkov. *J. Applied Chem.* (U. S. S. R.) 8, 280-84 (in German 2601 (1955)).—Ash obtained in the pyrolysis of shale at 870-1000° is treated (by percolation) in the cold with HCl ; there are obtained a residue (contg. mainly an active silica (a valuable ingredient for the progs. of cement) and a salt. contg. mainly $AlCl_3$ and $FeCl_3$. These are separated by fractional cryora. The $AlCl_3$ and Al_2O_3 is decomposed in a rotating kiln to Al_2O_3 , and the latter is passed through an absorption plant and returned to the process.

A. A. *Werner Herzog*

180.16.2 METALLURICAL EQUIPMENT CLASSIFICATION

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723130009-6"

ca

20

Polymerization of phenol-aldehyde resins within lumber as an antiseptivite measure. I. Ya. Klimov and V. P. Shishov. J. Applied Chem. 10, 8, 11, 12, 1043-4 (1968).—The wood is impregnated with bakelite-A (100: 4-8 hrs.), and the product heated at 120-140° to complete polymerization of the bakelite; under these conditions birch, beech and oak take up an equal wt. of resin, while pine and larch take up not more than 80%. The "bakelized" wood is obtained in resistant to the corrosive action

of numerous acids, and gases, with the exception of eq. NaOH. In general, the resistivity rises with the resin content, which for some purposes should amount to 30-80% of the wt. of the product. B. C. A

AIA 31.6 METALLURGICAL LITERATURE CLASSIFICATION

18

M

The determination of the dynamic activity of silicon gel with respect to the vapor of benzene. V. A. Kuklev, J. V. Kukleva, and A. M. Rakhimova. *J. Russ. Phys. Chem. Soc.* 12, 381-8 (1880).—The effect of thickness of gel layer, size of particles, excess of C_6H_6 vapor, rate of flow of the gas and temp. on the dynamic activity of a gel. PC_6H_6 and SiO_2 is reported. The dynamic activity of the gel is not inversely proportional to the thickness of the gel layer. H. M. Lebovitz

CONFIDENTIAL AND RESTRICTED AREA
The boiling points and vapor-phase composition of the
three-component mixture ethyl acetate-ethyl alcohol-
water. V. A. Kirov, I. Ya. Kliman and A. N. Grigorenko
J. Chem. Ind. (Moscow) 12, 680 (1951). Omitting
but not exact data are presented. The influence of the boiling
points at a given ratio of $KOAr$ to $KOEt$ show a max
and then a min. as H_2O is added. The effect is most
pronounced at about 30% $KOAr$ and 10% KOH .
H. M. Lester

*On the Detection of Bichloro Ethoxide in Metals and Alloys of Soviet Manufacture, L. J. Klyay and V. V. Andreev (*Khimicheskoe Mashinostroenie* ('Chem. Mechanical Engg.'), 1958, (4), 21-24).—[In Russian.] The investigation dealt mainly with steel and pig iron. Of the non-ferrous metals various brasses were tested—all of them proved unsuitable to sulphur detection. Lead containing 5% tinmony was particularly resistant.—N. A.

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723130009-6"

co

Silicate tileage for apparatus for carrying out reactions with hydrochloric acid. I. Ya. Klimov and D. I. Poptsov. Akm. Mekhanika 8, No. 6, 53-6 (1961). Chemie & Technik 24, 979. The material giving best results, as regards acid resistance, durability and physicochemical properties, is found either in the form of plates. The ceramic to be used with this tileage also consists of silicate, mixed with 10% adhesives. A. Poptsov. Chemist

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723130009-6"

1
2

Equilibrium in the system $\text{FeCl}_3 \text{-- MoO}_3$. I. V. Klyuev and D. I. Shcherby. *J. Russ. Chem. Soc.* 11, 5, 61-62 (1888). Equilibrium in the system are given at 1000°. The amount of FeCl_3 contained in the $\text{FeCl}_3 \text{-- MoO}_3$ crystals is a linear function of the content of FeCl_3 in solution except that at very low contents, it falls off more rapidly.
P. H. Rathenau

AB-154 METALLURGICAL LITERATURE CLASSIFICATION

Determination of small amounts of aluminum in presence of aluminum oxide. I.-J. KILNER and T. J. ARMSTRONG. *J. Appl. Chem. Inst.* 1958, 8, 2978-2982.—The Al_2O_3 containing 2-10% of Al is treated with aluminum $PbCl_4$ and the $PbCl_4$ formed is determined thermometrically. Chromatographic methods, based on oxidation of Al to Al_2O_3 , extraction of Al by dil. HCl , or pyrolysis of Al from eq. $CaSO_4$ by Al, gave high results. N. T.

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1988-1989

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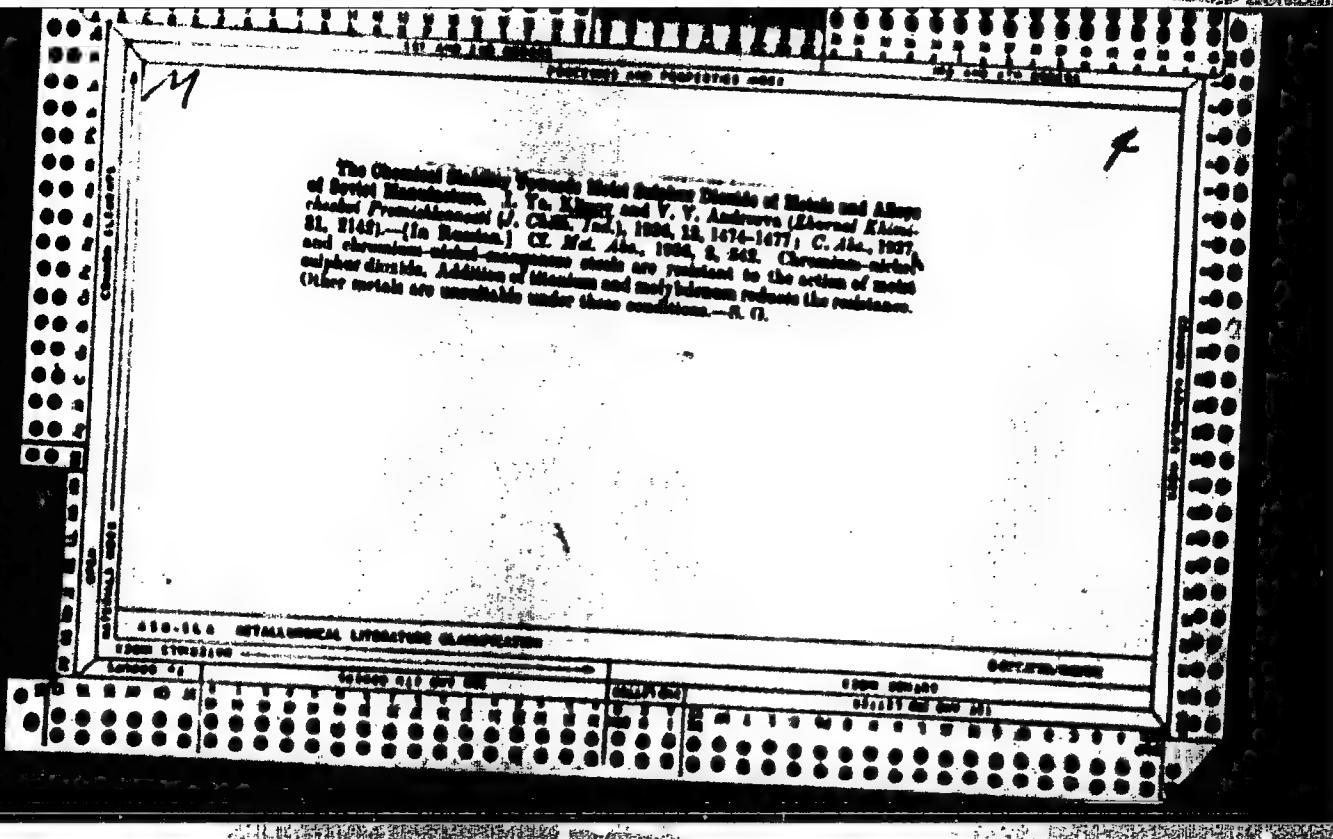
Reproducing lead by extracting in lining of apparatus used
in the separation of oil. I. Ye. Kuznetsov and D. Sychev.
Makhteshor Zaryevs Doku 12, 691-3 (1981).--Of the various
materials tested the best results were obtained by lining
tubes, esp. with lead Diabase and Mertalik stone and
concreting with Diabase concrete. 3-5% losses. C. B.

CA

2

The determination of the boiling point and composition

of the vapor of the ternary mixture sulfuric acid-aliquat
acid-water. V. A. Kiseev, I. Ye. Kiseev and A. N.
Gritsarevich. *J. Chem. Ed.* (MOSCOW) 12, 266 (1965).
- Rough details of these properties support the results of
Pump and Charles (*C. A.* 15, 3116) rather than those of
Perlman and Bannister (*C. A.* 10, 2266). H. M. L.



01

The chemical stability of hard film materials of Soviet manufacturers and their comparative formulation. I. Ye. Klimov and D. I. Sychev. *Khim. Mekhanizm* 1957, No. 7, 22-4; *Khim. Sistem.* 1958, No. 2, 122 (1958).— The authors investigated the chemical stability and the mech. strength of the Ryazan hard film plates No. 20, 40 and 60. The Ryazan plates cut and of the plates were cleaned from dust by boiling water, and their chemical stability was investigated by heating, and in the case, in the following substances: H_2PO_4 , 5%, and H_2SO_4 , 4.5%, and H_3PO_4 , 20% and H_2O_2 , 5%. The acid stability was calcd. according to the law of α_t , from the following equation: $\alpha_t = \alpha_0 e^{-Kt}$, where α_t = acid stability, α_0 = α_t of sample before and α_t = α_t of sample after the expt. The expt. K was 0.05-0.2005 of the theoretical. In 12% HCl soln. it varied from 97.0 to 98.1%. The mech. strength was not influenced by the corrosive medium. W. R. Morris

Ca

13

The effect of organic addition agents on the properties of asbestos fibers, composition, I. S. Kimer and D. I. Svetlik, Org. Coat. Ind. (U. S. S. R.), 32, 7 (1952). Luting compounds, were prepd. from paraffin, aniline-oil with and without the addition of KF and water glass and zinc acetate, resins, linseed oil and bitumen emulsified in water glass. Their relative chem. stability and permeability to hydrocarbons were tested by immersion in a soln. of lignosulfonate and caustic, 4-8% SO_3 , at atm. pressure and room temp., and at 6 atm. and 150°. The treated samples were then tested to det. the mech. strength. In all cases the addition of org. substances improved the chem. and mech. properties of the luting compound. The best results were obtained with the addition of bitumen and linseed oil. Because of the low dispersion in the mass, no separation at high temp. takes place.

1990 and 1991, the mean age of the patients was 40.7 years (range 18-75 years).

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723130009-6"

Chemical resistance of silicon and chromium iron produced in the U. S. S. R., I. Ya. Klimov, A. M. Markov, Sov. Patents 6, No. 6, 40-41 (1971); Chemist & Industrial 60, 1971. Heat resistance to 1100°C is exhibited by cast iron containing 11 wt% Si. Cast iron containing 49.3% Cr is less resistant under these conditions, but is the material which best resists 1100°C sulfur, for which 20 iron is not suitable. Cr iron is less attacked by NaOH than is Si iron; but even the former should be used in presence of only low NaOH contents. Both of these irons exhibit enhanced resistance to NaOH , hydrochloric acid and sulfur acid. A. P.C.

9

W. A. MURRAY

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723130009-6"

BC

E-5-5

Stability of metallic coatings, applied by spraying on steel, to sea-water and river water.
J. Electroplating (J. Appl. Chem., Russ.), 1967, 10, 1200-1217. — The protective action of Zn and Zn-Cd coatings against corrosion of Cu stored by sea-H₂O or river-H₂O is > that of Cu, Cu on Zn, or Al coatings, and also that of Cu on Zn is > of Cu. The rate of corrosion is not of the thickness of the layer of Zn above 0.05 mm., nor appreciably increased by rise in temp. from 15° to 65°.
R. T.

455-114 METALLURICAL LITERATURE CLASSIFICATION

The action of sulfuric acid and sulfur dioxide upon special
metals and alloys of Soviet production.

Added (1) 0.5 g. R-130, (2) 0.17 g. Ferroch
100-01 (1972). In KVs-1, KVn-1, and K-Vn-2 steels
(the composition: C 0.14, Si 0.18, Mn 0.18, Cr 17 wt.-%, Ni 1.38, Ni 48, Ni 68, and Ni 90, C 0.197%), (steel 1, base of
which contains no less than 0.01 g. per sq. cm. per hr. in the
1100°C (not higher than 10%) at 700° and at room temp.
up to 600°C). The K22-1, K23-2, K23-3 and K23-4 steels
(the composition: C 0.11, Si 0.20, Mn 0.25; Mn 0.17, C 0.18,
Si 0.12, P 0.05, Cr 0.04, Ni 0.17, Ni 0.22; Cr 1.16%,
Ni 0.18, Ni 48, Ni 68, Ni 9.17, Ni 9.81, Ni 21, Ni 0.67,
Ni 0.60, Ni 3.00%, resp.) dissolved even in 0.1% H₂SO₄ at
room temp. At room temp. the following alloys have not
more than 0.1-0.2 g. per sq. cm. per hr. in 0.1-0.05% H₂SO₄:
Al bronze (C 0.25, Al 7.30 and Cu 90.15%), phosphorus
brass (P 0.44, Ni 0.20, Pb 0.10, Cu 0.20, Zn 0.30, Cd
0.10, and Sn 4.00%), Mn bronze (Mn 2.80, Fe 0.21, Cu
0.10, Zn 4.18 and Pb 0.47%), Ni bronze (Fe 0.10,
Cu 0.20, Zn 3.20, Pb 0.43 and Sn 4.70%), Ni-Zn bronze
(C 0.27.92, Zn 1.24, Pb 0.00 and Ni 9.40%), and the
nickel-lead Pb (Pb 97.74, Pb 0.00 and Sn 1.24%). "Bortidet"
(1) (Pb 90.00 and Sn 10.00%), Cu (99.99%), Ni and Cr
can lose less than 0.01 g. in 100°C, up to 600°C even,
at room temp.; Cr rust loss is not stable at 600°, whereas
the Ni rust loss is stable. The following lose not more
than 0.2 g. per sq. cm. per hr. in 0.1% (relative humidity
100%): austenitic stainless steel, 18-8, 18-10, 18-12, 18-14,
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The action of chemically active compounds on the mechanical properties of stainless steels. I. V. Abramov and V. V. Andreeva. Izvest. Metallofiz. 1979, No. 27, p. 62; Atom. Reakt. Zhur. 1, No. 7, 1979 (1980). The effects of hot and cold rolling on the shear resistance

of acid-resistant stainless steels were investigated, after the change of the mech. properties of these steels after the action of chemically active substances, and the crystal lattice structure of the steels. Samples from the "Serpukhov" plant RYal, RYal with Ti, RYal2, and Cr-Mn-Ni steel were used. The experiments were performed with Ca/(Mn)₂ rods, and with a boronite base in an atmosphere for 10 hrs. The rolling caused no changes either in chem. or in mech. properties. The loss of weight isodentified. The cold rolling increased the temporary resistance to fracture and lowered the viscosity of all investigated steels. For the steel RYal (hot rolling) and for RYal with Ti both media increased slightly the mech. properties. RYal in most cases lowered the mech. properties of steel. W. R. Henn

AIA-514 METALLURGICAL LITERATURE CLASSIFICATION

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